The Future of Fiscal Policy

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Outline

1. Underlying economic changes related to demographics and technology
2. Induced effects on the fiscal policy environment
3. Implications for fiscal policy

Underlying Economic Changes

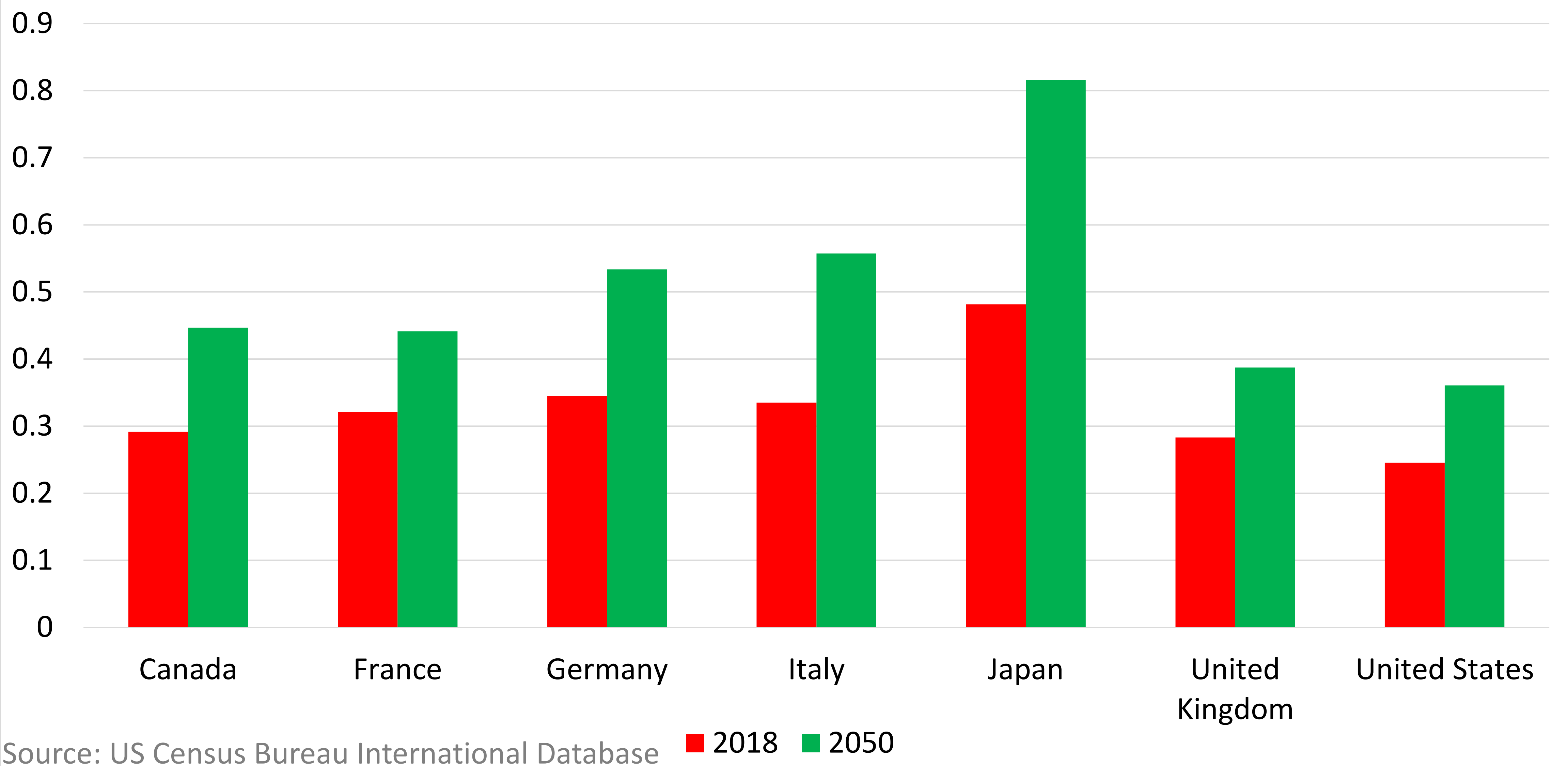
- Population aging
- Economic integration
- Economic inequality

Induced Effects on Fiscal Policy Environment

- Low interest rates
- Fiscal structure and fiscal stress
- Fiscal spillovers

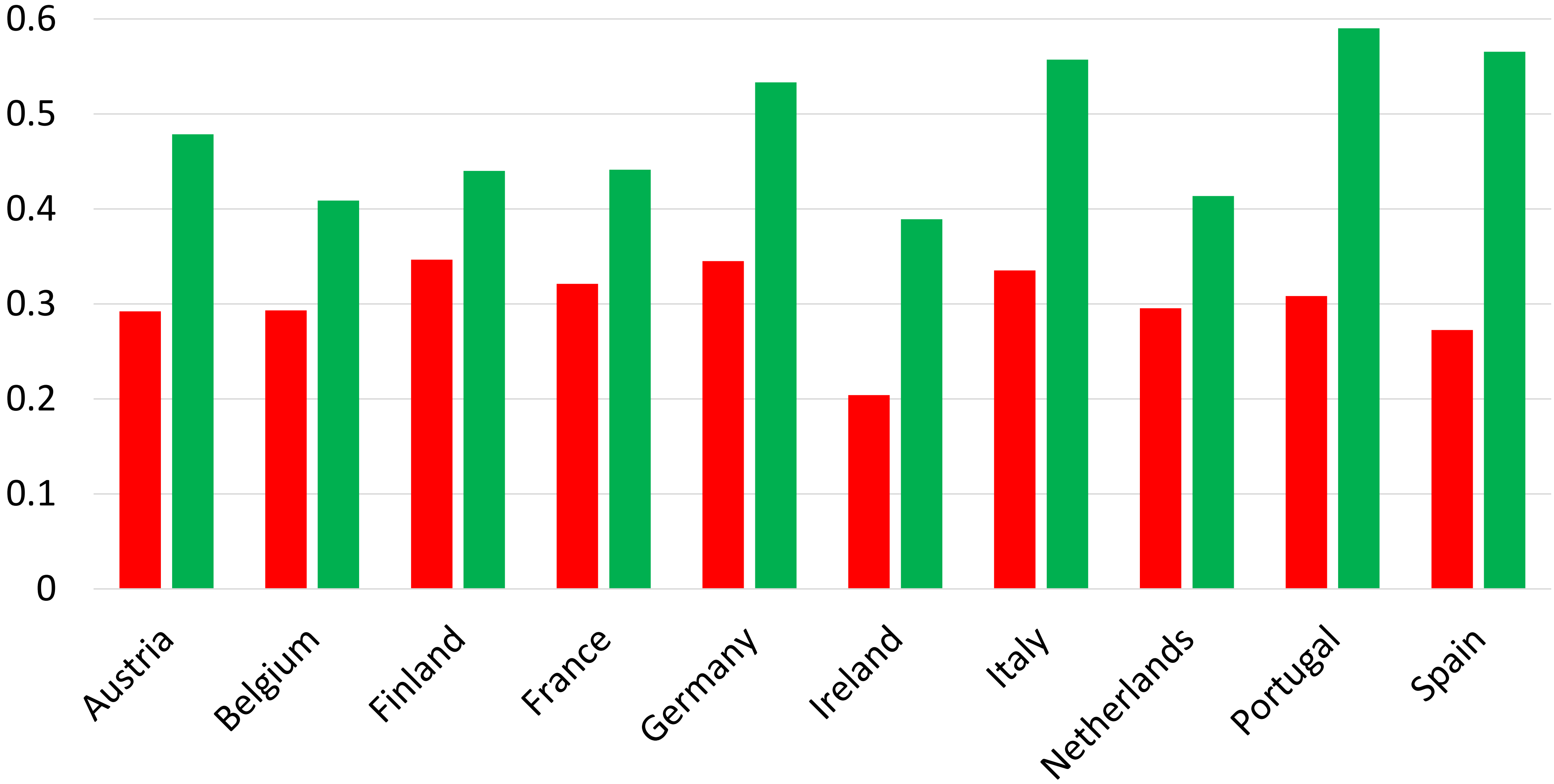
Population Aging

G-7 Old-Age Dependency Ratios



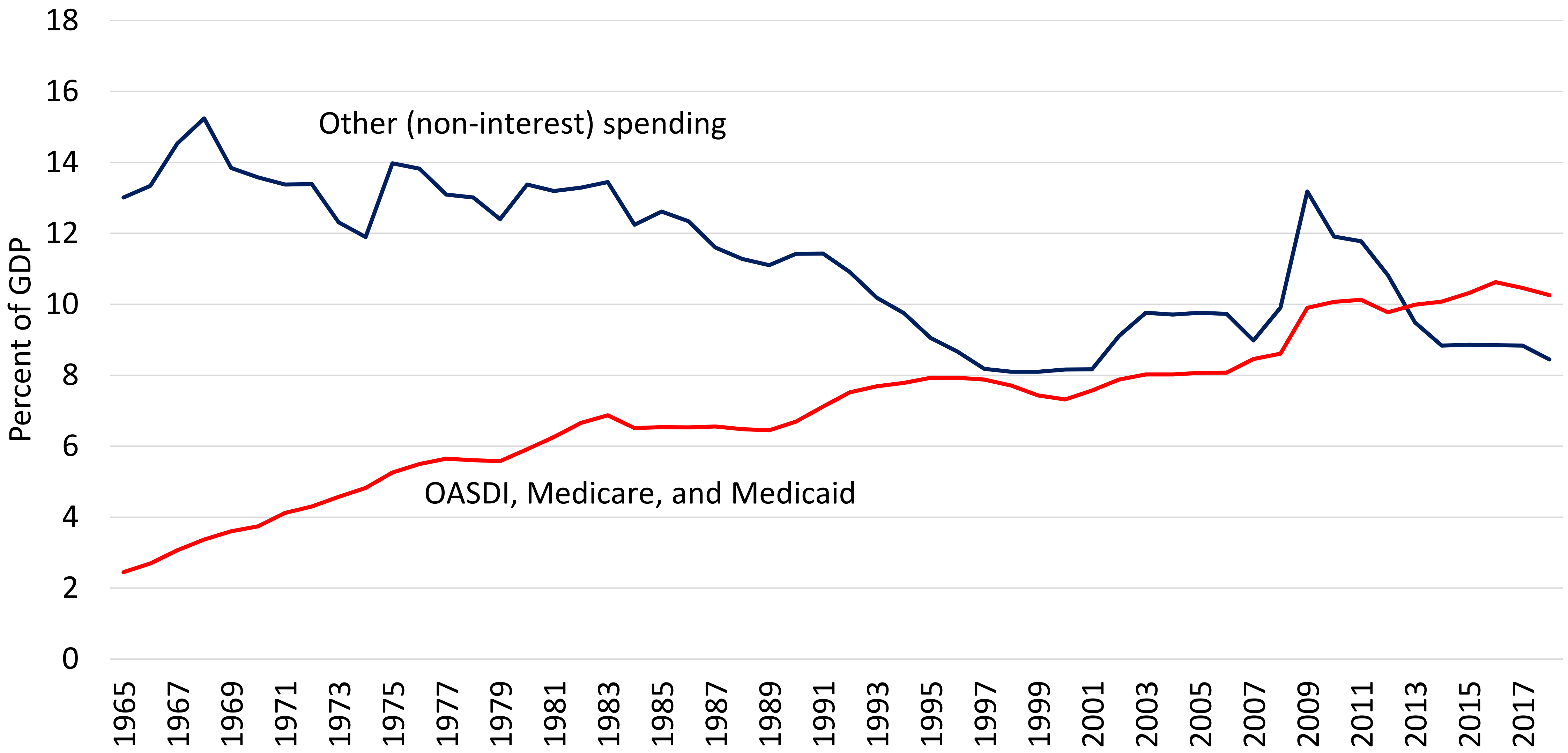
Source: US Census Bureau International Database

European Old Age Dependency Ratios



Source: US Census Bureau International Database

U.S. Federal Spending

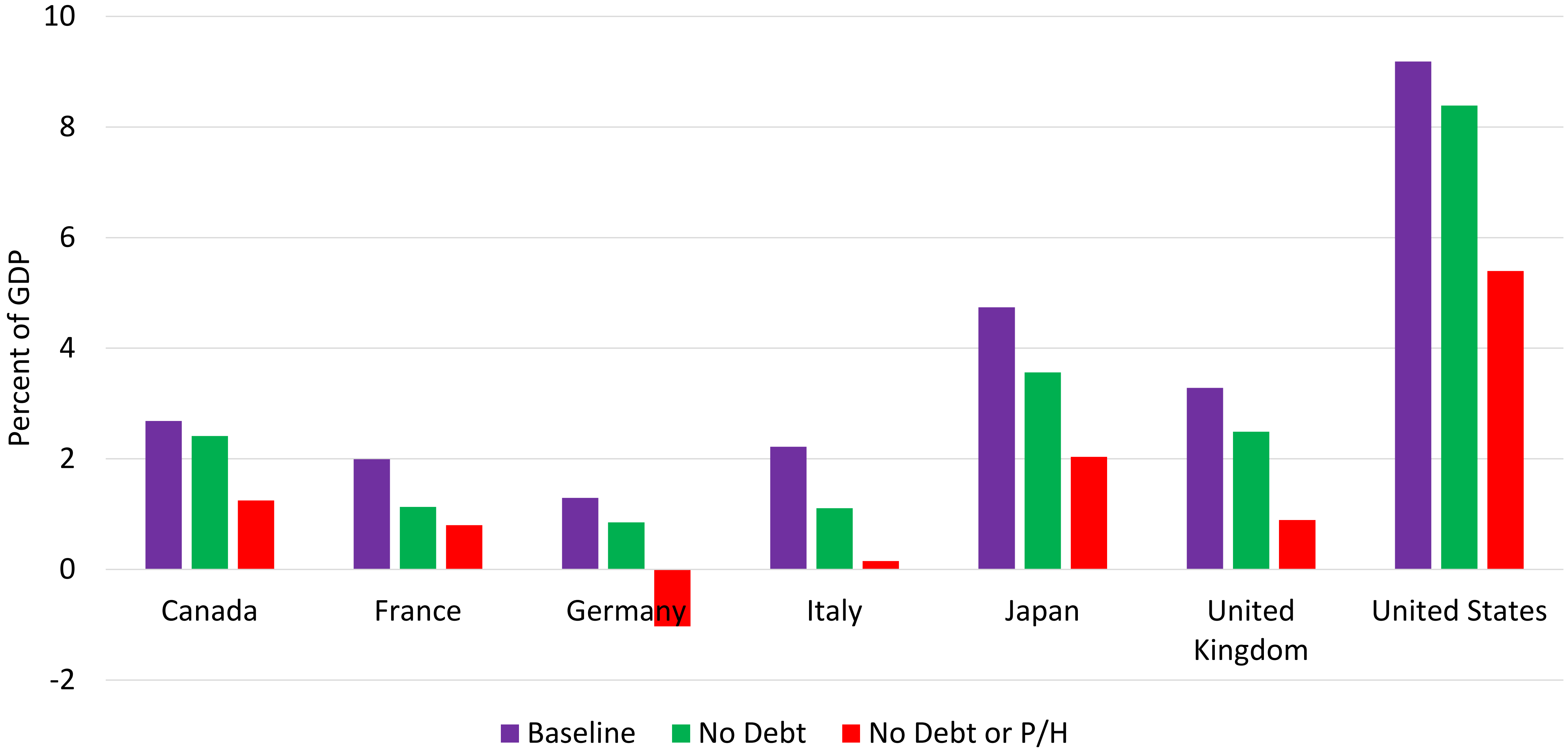


Source: Congressional Budget Office

Increased (Old) Age-based Spending

1. Programs tend to be unfunded, leading to increased fiscal pressure

Fiscal Gaps (through 2050), G-7 Countries



Source: Auerbach-Gorodnichenko ([2017])

Increased (Old) Age-based Spending

1. Programs tend to be unfunded, leading to increased fiscal pressure
2. Different flexibility in responsiveness

Determinants of Federal Spending Changes (1993-2003)

Independent Variable	All Discretionary	Nondefense Discretionary	Soc. Security/ Medicare/ Medicaid
Constant	.002	.001	.001
	(.001)	(.0004)	(.0005)
Budget Surplus (-1)	.381	.124	.026
	(.070)	(.039)	(.053)
GDP Gap (-1)	.441	.158	.077
	$\bar{R}^2$ (.096)	(.054)	(.073)
$\bar{R}^2$	.754	.451	.146

Source: Auerbach (2006)

Increased (Old) Age-based Spending

1. Programs tend to be unfunded, leading to increased fiscal pressure
2. Different flexibility in responsiveness
3. Different trends in revenue sources
   – Shift from income taxes to consumption taxes may reduce cyclical responsiveness and automatic stabilizers

Lower Economic Growth

- Slower labor force growth means adjusting norms and targets
- But productivity growth may slow as well, because of changing labor force composition (e.g., Maestas et al. 2016)

Changing Political Equilibrium

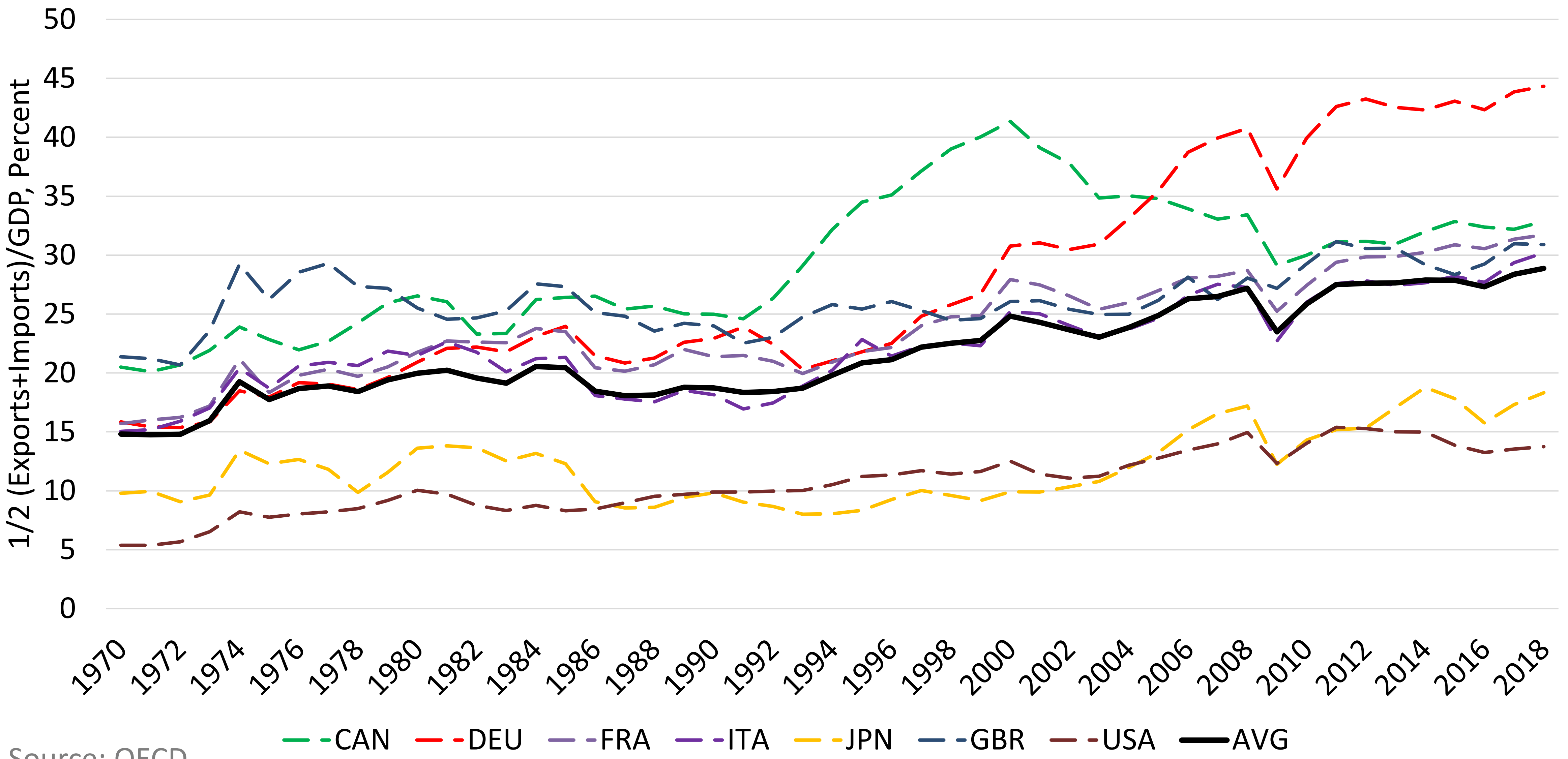
- Stronger support for spending on programs for the old vs. the young (e.g., pensions vs. education; e.g., Poterba 1997)
  - Greater difficulty to resolve budget stress via reductions in old-age programs

Induced Changes in Capital-Labor Ratio

- May be an important factor contributing to lower interest rates

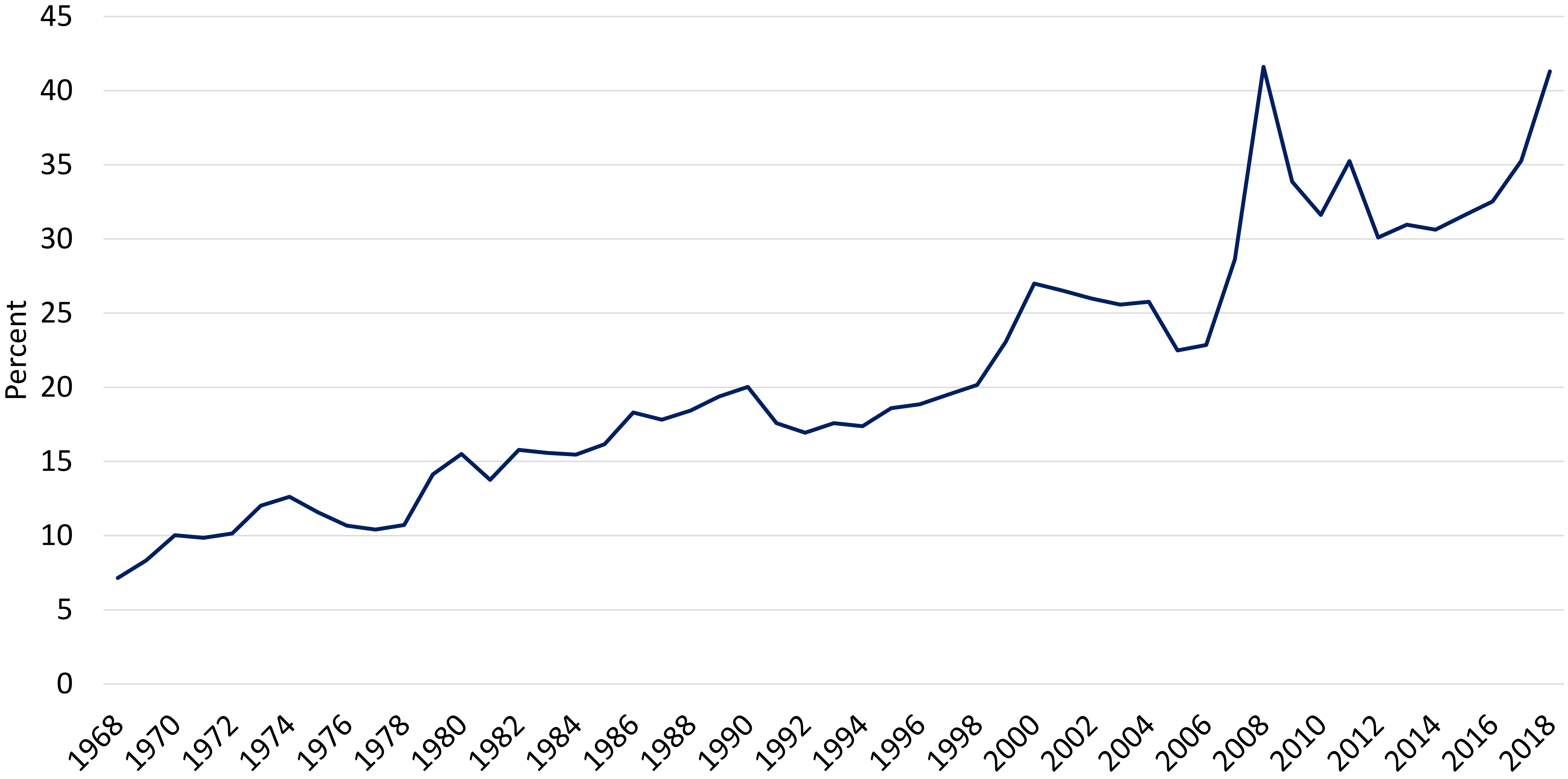
Economic Integration

Trade in Goods and Services



Source: OECD

Share of US Corporate Profits from Foreign Sources



Source: US BEA

Effects of Integration

- Large fiscal spillovers
  - E.g., Auerbach and Gorodnichenko (2013)

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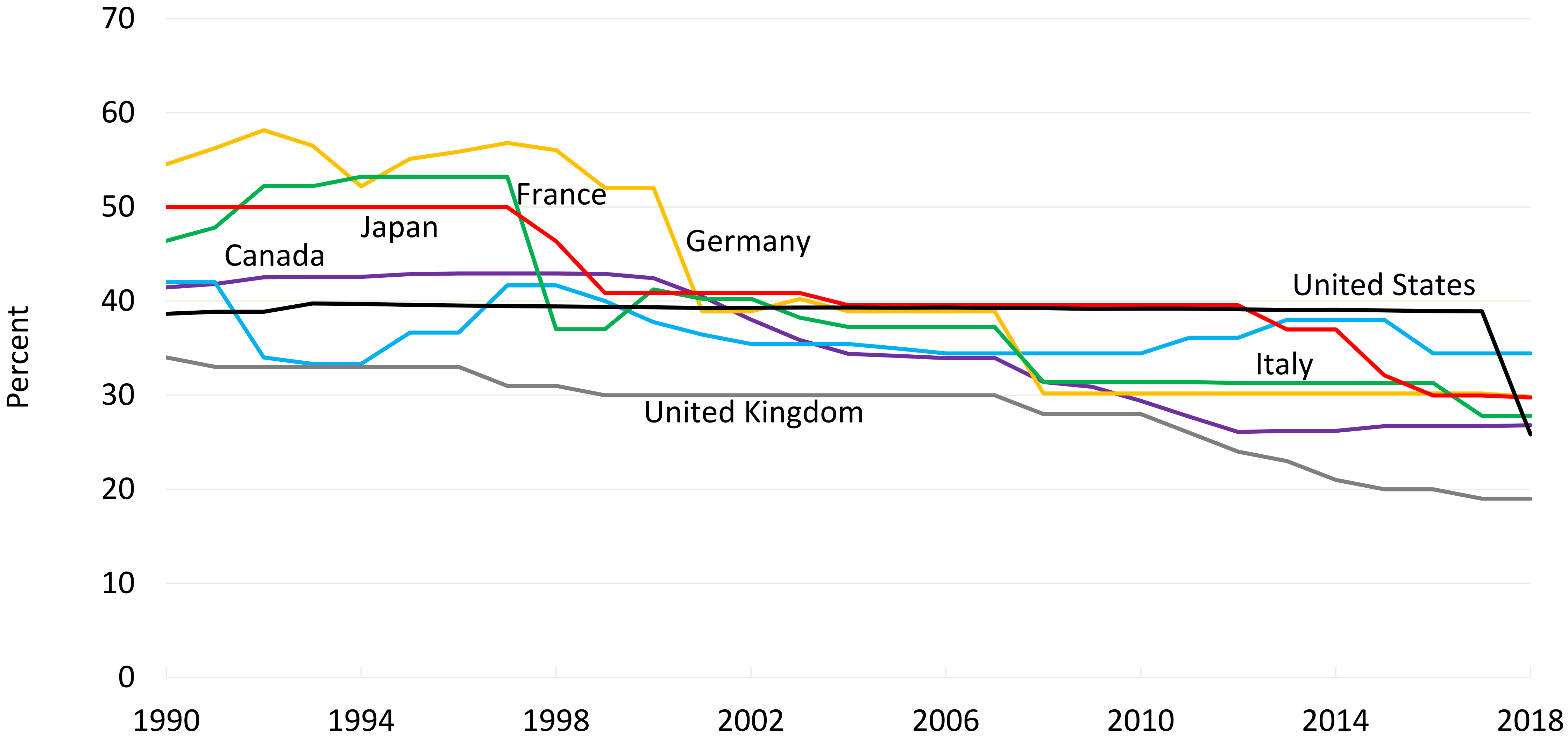
G-7 Corporate Tax Rates



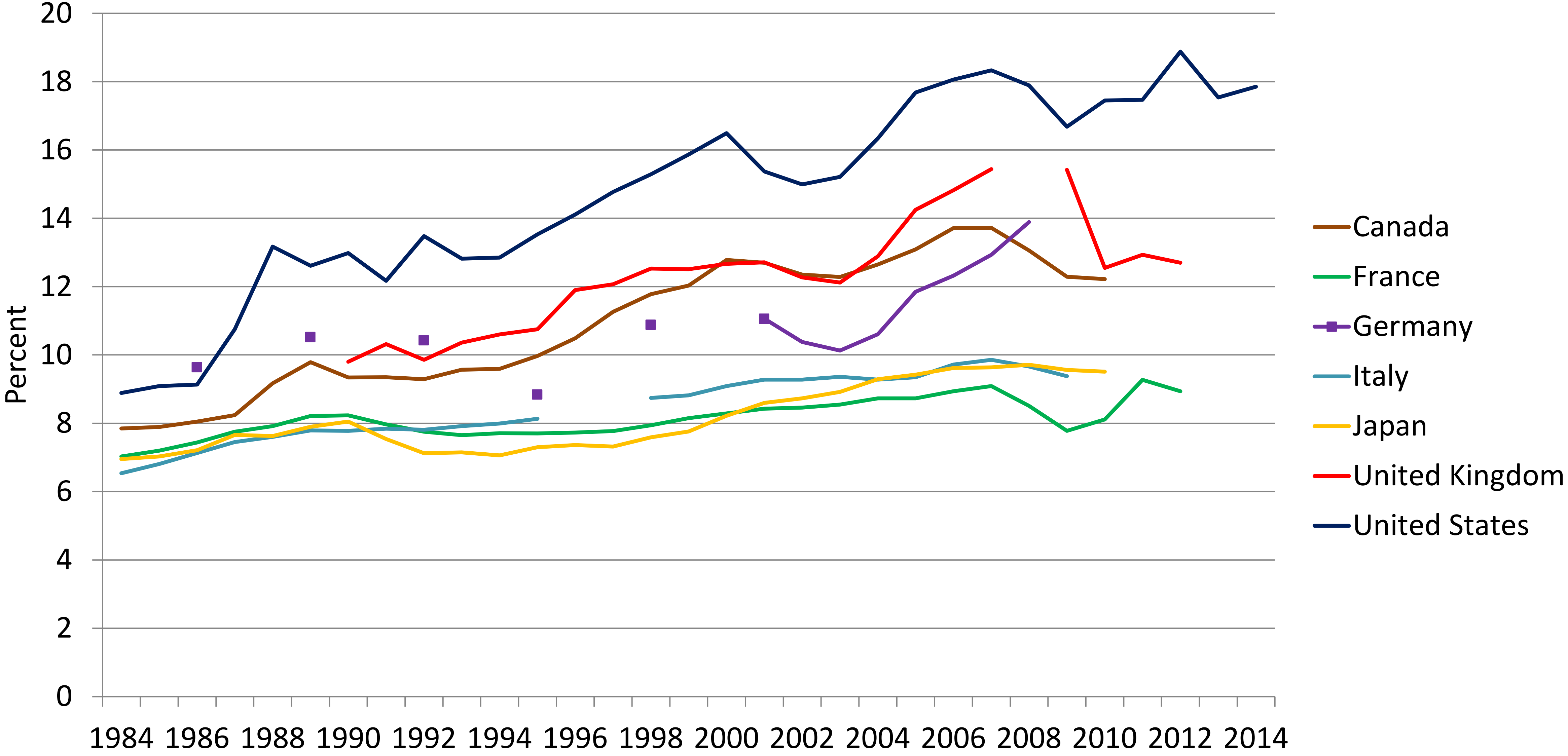
Source: OECD

Effects of Integration

- Large fiscal spillovers
  - E.g., Auerbach and Gorodnichenko (2013)
- Increased tax competition
  - Further promoted by production shifts toward intangible investment and services (especially digital)

Economic Inequality

Top 1% Income Share of Total Income

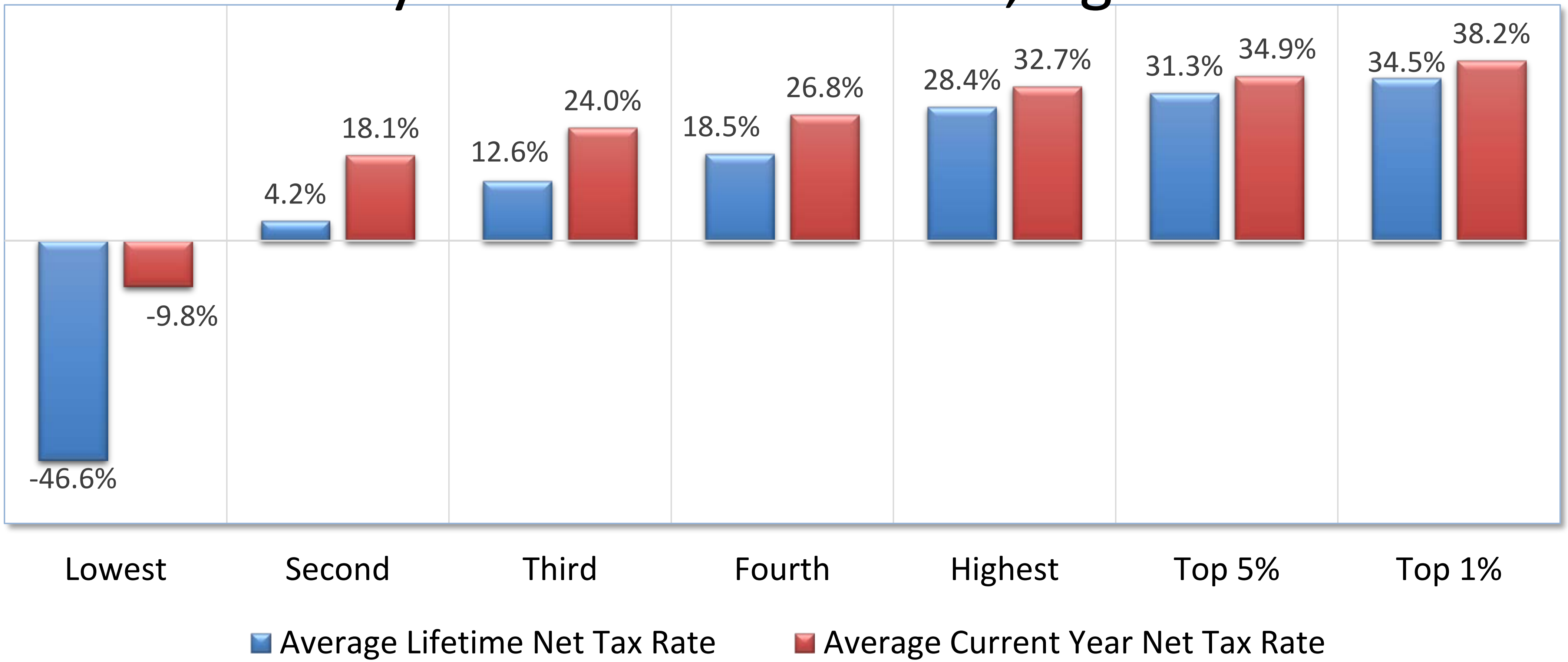


Source: World Inequality Database

Inequality and Demographic Change

- Aggregation across cohorts may lead to misleading conclusions about inequality
  - Auerbach, Kotlikoff, and Koehler (2019): US fiscal system much more progressive than snapshot aggregation implies

Average Lifetime and Current Year Net Tax Rates by Resource Percentile, Ages 40 - 49



Source: Auerbach, Kotlikoff, and Koehler (2019)

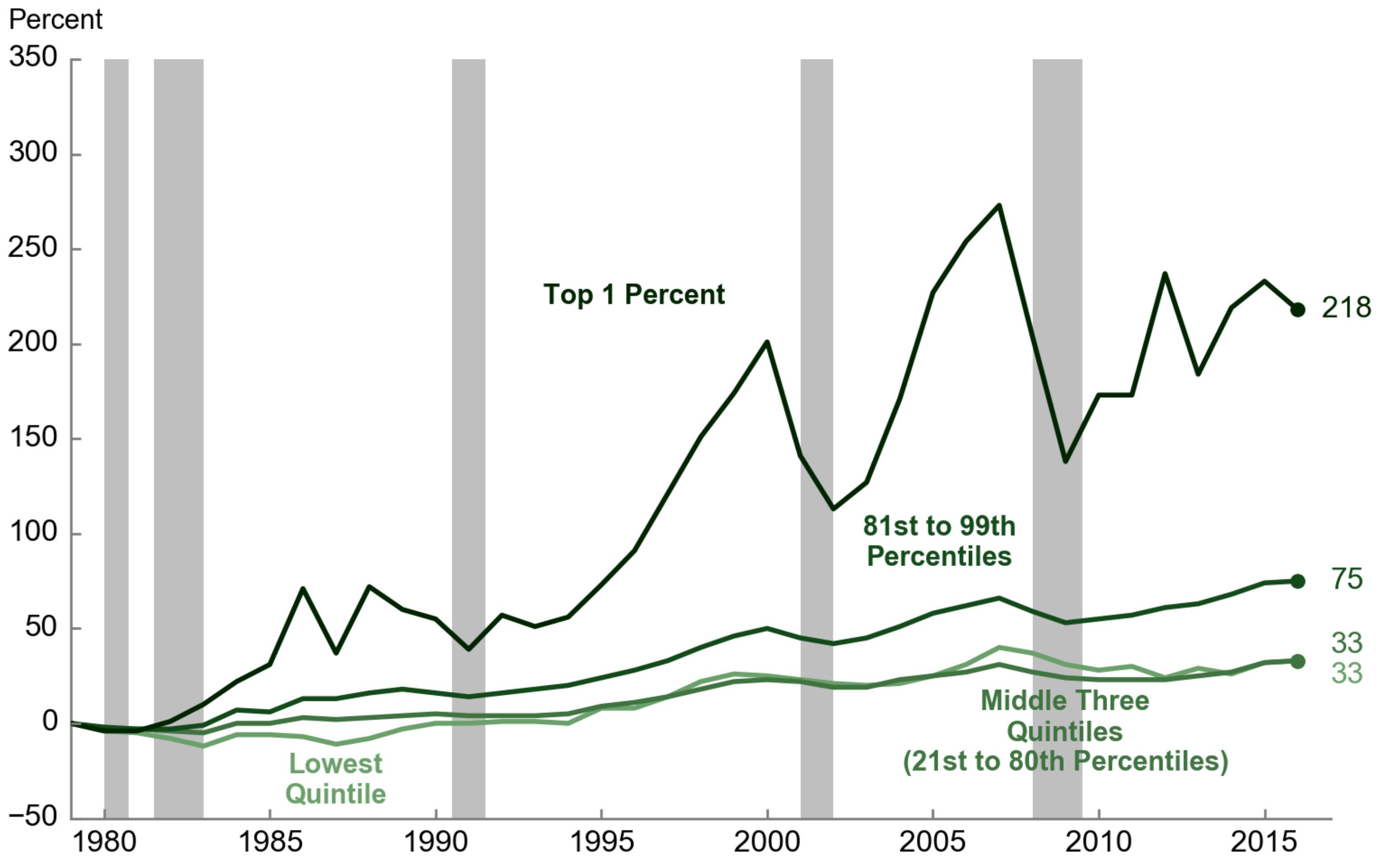
Inequality and Demographic Change

- Aggregation across cohorts may lead to misleading conclusions about inequality
  - Auerbach, Kotlikoff, and Koehler (2019): US fiscal system much more progressive than snapshot aggregation implies
  - Changing age structure may induce spurious changes in measured inequality
  - Within-cohort inequality may behave differently over time than aggregate inequality
- Inequality across cohorts an important issue for fiscal policy choices

Potential Impacts on Fiscal Policy

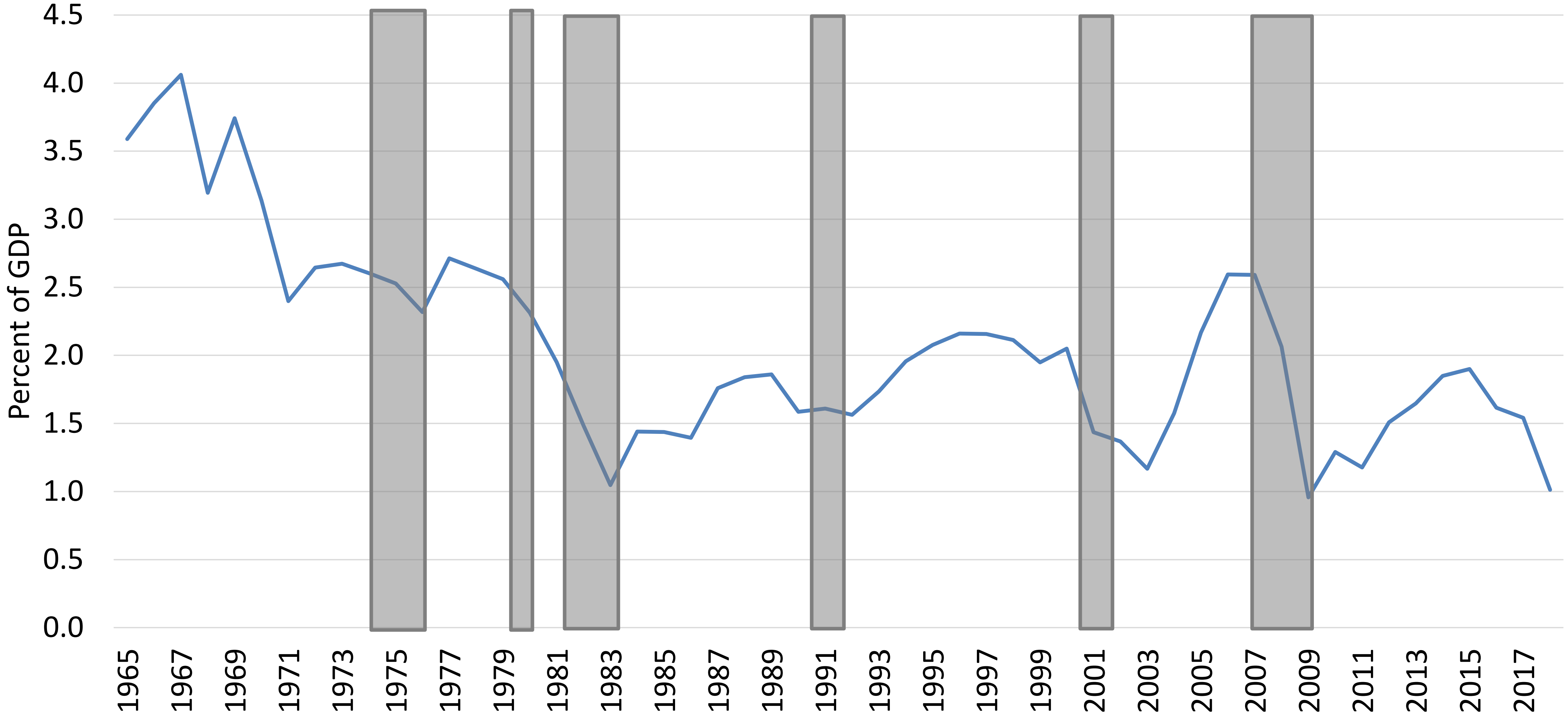
- A push to rely more on sources of revenue that are difficult to tax (e.g., corporate taxes, wealth)
- A stronger reliance on more volatile sources of revenue (e.g., high incomes, corporate profits)

Cumulative Growth in Average Before-Tax Income



Source: Congressional Budget Office (2019)

U.S. Corporate Taxes



Source: Congressional Budget Office

Potential Impacts on Fiscal Policy

- A push to rely more on sources of revenue that are difficult to tax (e.g., corporate taxes, wealth)
- A stronger reliance on more volatile sources of revenue (e.g., high incomes, corporate profits)
  - This may or may not enhance automatic stabilizers, given heterogeneity of responses to tax changes (e.g., Zidar 2019).
- Political pressure not to cut spending
  - Illustration: complete breakdown of US fiscal feedback rules

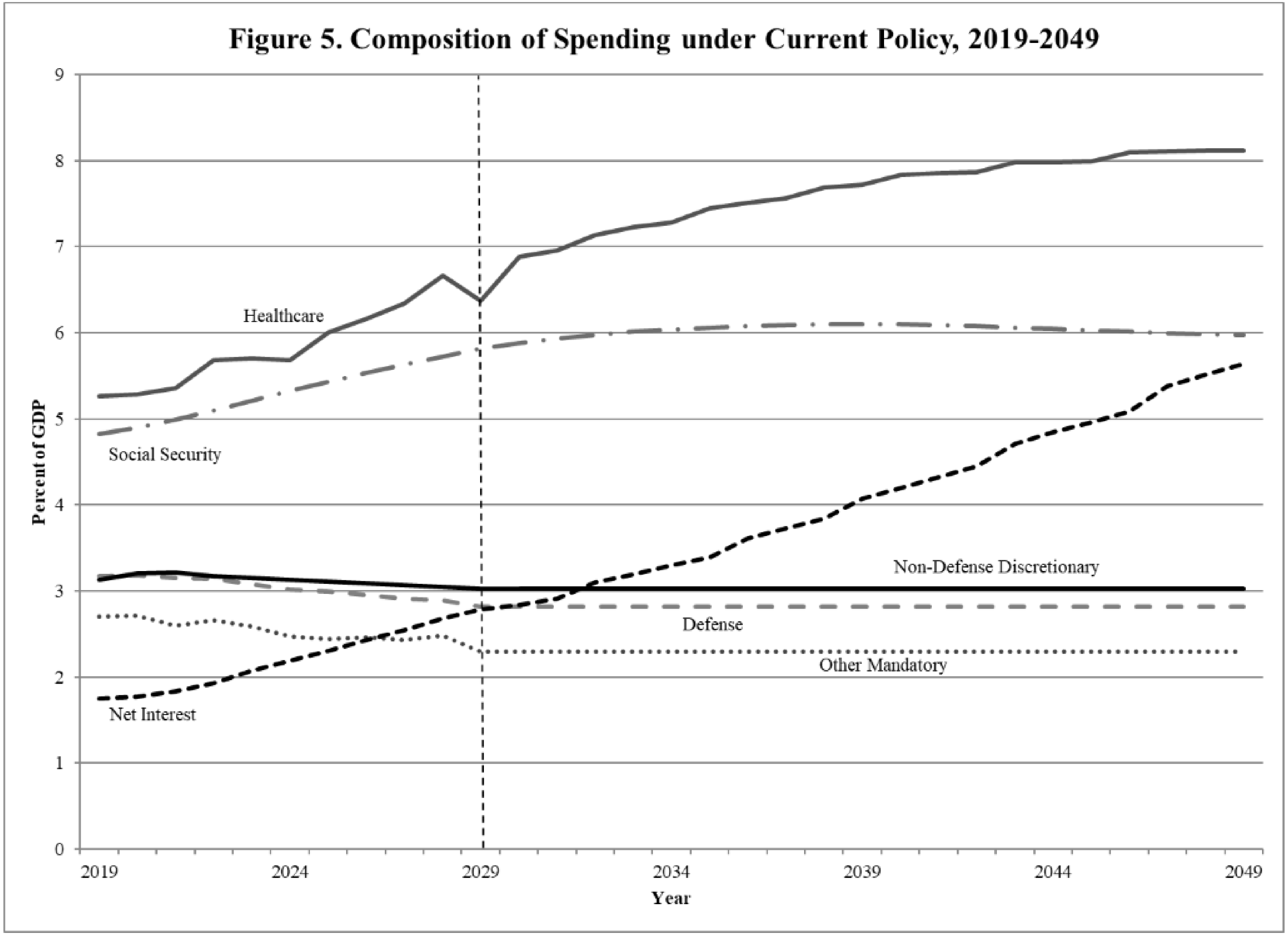
Implications for Fiscal Policy (1):
Responding to Low Interest Rates

Responding to Low Interest Rates

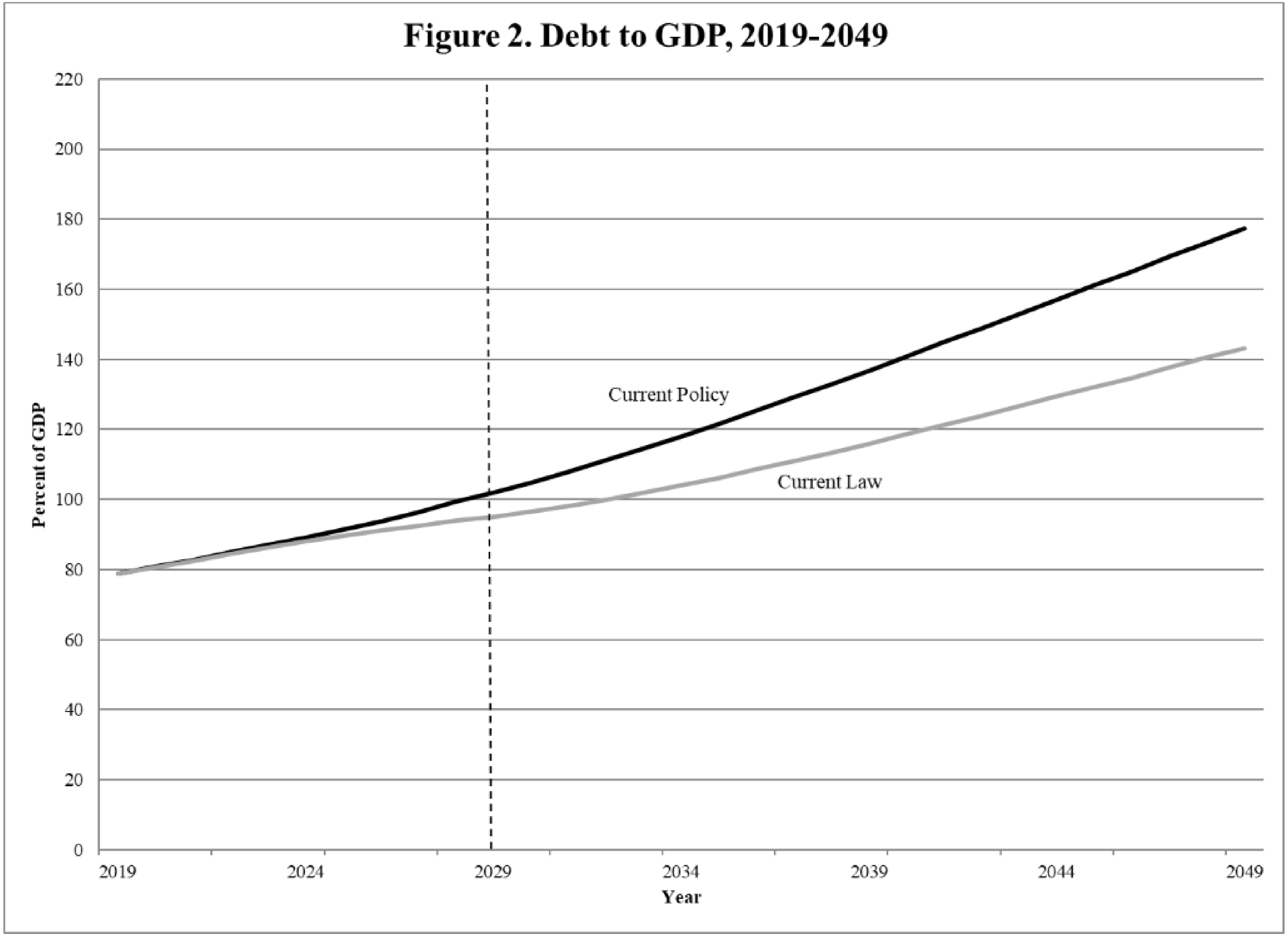
- It matters why they are low
- E.g., savings glut (some related to demographic change) vs. shortage of safe assets
  - Different effects on private rates of return
  - Different policy prescriptions (e.g., can increase supply of safe assets without increasing *net* government liabilities)

Responding to Low Interest Rates

- Does resulting slower rate of debt accumulation call for a relaxation of budget concerns? Some words of caution
  1. Even with low projected interest rates, debt/GDP ratios and debt service will rise because of age-based spending growth



Source: Auerbach and Gale (2019)



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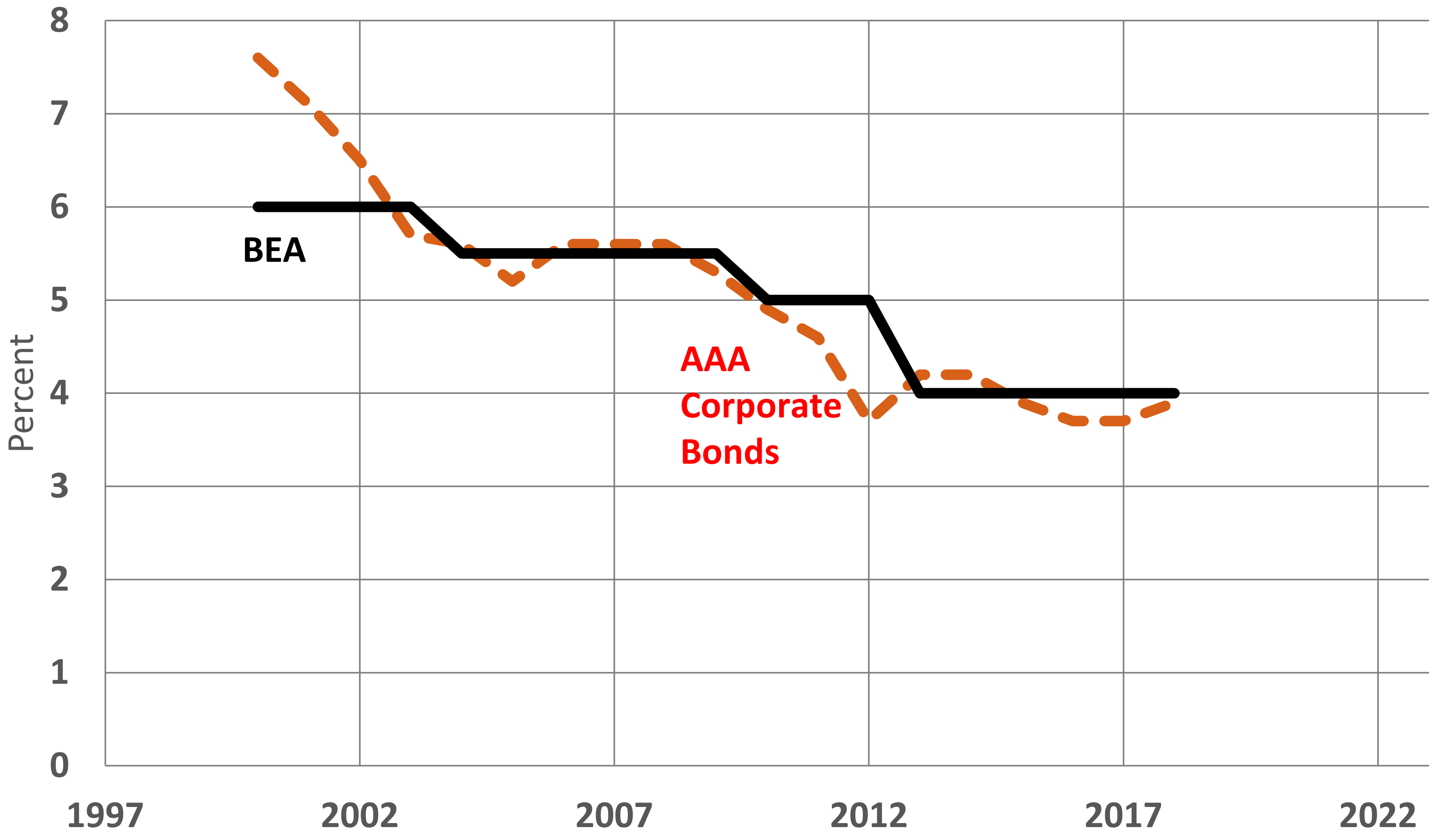
Responding to Low Interest Rates

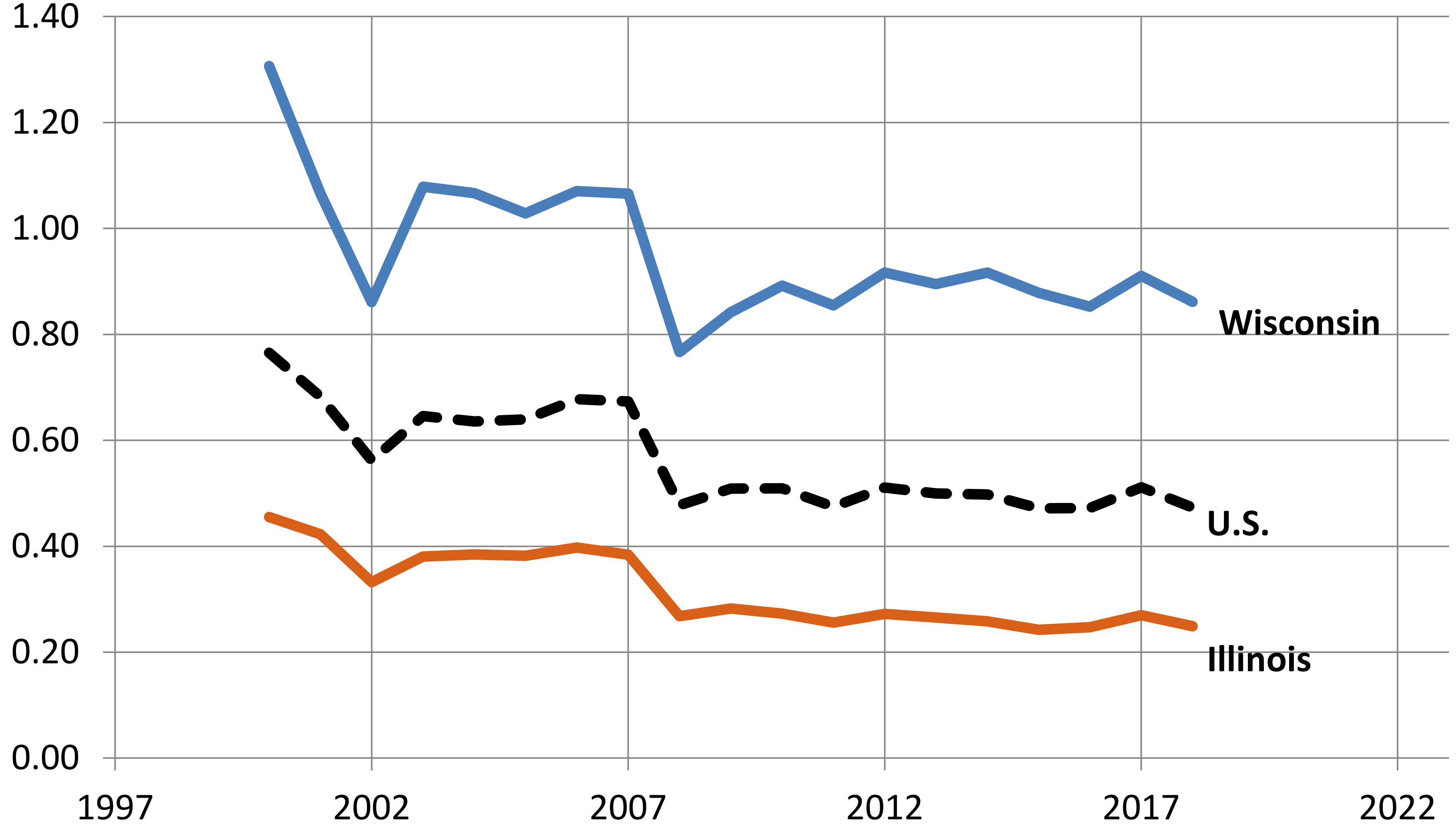
- Does resulting slower rate of debt accumulation call for a relaxation of budget concerns? Some words of caution
  1. Even with low projected interest rates, debt/GDP ratios and debt service will rise because of age-based spending growth
  2. For unfunded liabilities, low interest rates are not helpful
     - Indeed, they hurt our ability to pre-fund such obligations (as with US state and local pension obligations)

Discount Rates for U.S. State Pension Plans



Source: BEA (2019)

Pension Fund Assets Relative to Benefit Entitlements



Source: BEA (2019)

Responding to Low Interest Rates

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  2. For unfunded liabilities, low interest rates are not helpful
     - Indeed, they hurt our ability to pre-fund such obligations (as with US state and local pension obligations)
  3. $r - g$ matters, but so does g
     - If seek to maintain target debt-GDP ratio, larger adjustments will be needed when g has been low, and incomes lower

Responding to Low Interest Rates

- But a clear need for more robust fiscal policy options, given limits on monetary policy potential (even with QE, etc.)

Implications for Fiscal Policy (2): Responding to Fiscal Structure and Fiscal Stress

Responding to Fiscal Structure and Fiscal Stress

- Given the sources of impending budget imbalances, need greater focus on long-term, age-based programs
  - Existing budget rules do not deal well with such problems, even if they attempt to account for program reforms
  - The nature of needed adjustments calls for incorporation of measures of generational effects, not just overall budget impacts, because policies with similar budget effects may have quite different generational impacts
- The greater complexity of necessary analysis should lead to more focus on fiscal institutions and less on fiscal rules

Responding to Fiscal Structure and Fiscal Stress

- Low interest rates, and the associated effects on short-term budget sustainability and monetary policy limits, point to a need for weaker short-run constraints on fiscal policy
  - Another argument against traditional budget rules
- The need for stable and growing revenue sources, in the presence of population aging and increased economic integration, should lead to increased reliance on consumption and destination-based taxes, including corporate taxes

Responding to Fiscal Structure and Fiscal Stress

- In light of political frictions facing needed budget responses, adaptations to policies needed for both high- and low-frequency budget adjustments
  - For stabilization policy, more focus on automatic stabilizers as an objective, rather than just a policy byproduct
  - For long-term, age-based programs, more automatic adjustments (e.g., retirement age indexation, notional defined contribution systems, etc.)

Implications for Fiscal Policy (3): Responding to Fiscal Spillovers

Responding to Fiscal Spillovers

- Need additional research on spillovers, to determine the extent of heterogeneity with respect to different policies
  - Spending vs. taxes/transfers
  - Tradeables vs. nontradeables
- Within EC, can let budget rules/norms reflect aggregate as well as country-specific conditions (e.g., less tight in cases of general economic weakness)

Conclusions

- Underlying economic and demographic changes make fiscal policy more important – and more difficult
  - Various factors point to a need for greater tolerance for stronger short-run fiscal policy responses
  - But these and other factors point to a need for better tools for dealing with longer-term budget challenges
- Reforms – of tax systems, age-based spending plans, budget rules, and fiscal institutions, are all needed
  - Some straightforward; others less so